

What is claimed is:

1. A display assembly, comprising:
a plurality of radiation wave modulators, each modulator including:
a first element for producing a wave component from a radiation wave, said wave component having a polarization property wherein said polarization property is one of a set of orthogonal polarizations;
an optical transport for receiving said wave component;
a transport influencer, operatively coupled to said optical transport, for affecting said polarization property of said wave component responsive to a control signal; and
a second element for interacting with said affected wave component wherein an intensity of said wave component is varied responsive to said control signal;
a radiation source for producing said radiation wave for each said modulator; and
a controller, coupled to said modulators, for selectively asserting each said control signal to independently control said intensity of each said modulator.
2. The assembly of claim 1 wherein said first element and said second element are polarization filters.
3. The assembly of claim 1 wherein said elements are integrated into said transport.
4. The assembly of claim 1 wherein said influencer produces a controllable magnetic field parallel to a propagation direction of said wave through said transport to alter said polarization property.
5. The assembly of claim 1 wherein said influencer alters said polarization property by changing a rotation angle of said wave component in a range from about zero degrees to about ninety degrees.
6. The assembly of claim 1 wherein said transport is a fiber waveguide including a core and a cladding and wherein said influencer includes a magnetic material proximate said cladding.

7. The assembly of claim 6 wherein said magnetic material includes permanent magnetic material.
8. The assembly of claim 6 wherein said magnetic material is selectively magnetized responsive to an electric current.
9. The assembly of claim 6 wherein said magnetic material is integrated into said fiber waveguide.
10. The assembly of claim 5 wherein said elements are circular polarization filters having a crossed transmission orientation.
11. The assembly of claim 5 wherein said elements are circular polarization filters having an aligned transmission orientation.
12. The assembly of claim 1 wherein one or more of said wave components may be extinguished responsive to preselected control signals from said controller to one or more corresponding modulators.
13. The assembly of claim 1 wherein said modulators each have an output port for producing said wave component with said influencer controlled intensity.
14. The assembly of claim 13 wherein said output ports are arranged into a display pattern.
15. The assembly of claim 14 wherein said display pattern is a regular ordered matrix of N rows and M columns.
16. The assembly of claim 13 further comprising a front panel for arranging said output ports into said pattern.
17. The assembly of claim 16 wherein said front panel includes a pixel effect element proximate each corresponding output port.
18. The assembly of claim 17 wherein each said pixel effect element disperses said wave component from said corresponding output port.
19. A display method, the method comprising:

producing a radiation wave for each of a plurality of modulators, each modulator including:

a first element for producing a wave component from said radiation wave, said wave component having a polarization property wherein said polarization property is one of a set of orthogonal polarizations;

an optical transport for receiving said wave component;

a transport influencer, operatively coupled to said optical transport, for affecting said polarization property of said wave component responsive to a control signal; and

a second element for interacting with said affected wave component wherein an intensity of said wave component is varied responsive to said control signal; and

asserting selectively each said control signal to independently control said intensity of each said modulator.

20. The method of claim 19 wherein said first element and said second element are polarization filters.

21. The method of claim 19 wherein said elements are integrated into said transport.

22. The method of claim 19 including producing a controllable magnetic field parallel to a propagation direction of said wave through said transport to alter said polarization property.

23. The method of claim 19 including altering said polarization property by changing a rotation angle of said wave component in a range from about zero degrees to about ninety degrees.

24. The method of claim 19 wherein said transport is a fiber waveguide including a core and a cladding and wherein said influencer includes a magnetic material proximate said cladding.

25. The method of claim 24 wherein said magnetic material includes permanent magnetic material.

26. The method of claim 24 including selectively magnetizing said magnetic material responsive to an electric current.

27. The method of claim 24 wherein said magnetic material is integrated into said fiber waveguide.

28. The method of claim 23 wherein said elements are circular polarization filters having a crossed transmission orientation.

29. The method of claim 23 wherein said elements are circular polarization filters having an aligned transmission orientation.

30. The method of claim 19 wherein one or more of said wave components may be extinguished responsive to preselected control signals from said controller to one or more corresponding modulators.

31. The method of claim 19 wherein said modulators each have an output port for producing said wave component with said influencer controlled intensity.

32. The method of claim 31 wherein said output ports are arranged into a display pattern.

33. The method of claim 32 wherein said display pattern is a regular ordered matrix of N rows and M columns.

34. The method of claim 31 further comprising a front panel for arranging said output ports into said pattern.

35. The method of claim 32 wherein said front panel includes a pixel effect element proximate each corresponding output port.

36. The method of claim 35 wherein each said pixel effect element disperses said wave component from said corresponding output port.

37. A display apparatus, comprising:
means for producing a radiation wave for each of a plurality of means for modulating, each including:

a first element means for producing a wave component from said radiation wave, said wave component having a polarization property wherein said polarization property is one of a set of orthogonal polarizations;

an optical transport means for receiving said wave component;

a transport influencer means, operatively coupled to said optical transport, for affecting said polarization property of said wave component responsive to a control signal; and

a second element means for interacting with said affected wave component wherein an intensity of said wave component is varied responsive to said control signal; and

means for asserting selectively each said control signal to independently control said intensity of each said modulator.

38. The apparatus of claim 37 wherein said first element means and said second element means include polarization filters.

39. The apparatus of claim 37 wherein said elements means are integrated into said transport.

40. The apparatus of claim 37 including a means for producing a controllable magnetic field parallel to a propagation direction of said wave through said transport means to alter said polarization property.

41. The apparatus of claim 37 including a means for altering said polarization property by changing a rotation angle of said wave component in a range from about zero degrees to about ninety degrees.

42. The apparatus of claim 37 wherein said transport means includes a fiber waveguide including a core and a cladding and wherein said influencer means includes a magnetic material proximate said cladding.

43. The apparatus of claim 42 wherein said magnetic material includes permanent magnetic material.

44. The apparatus of claim 42 including means for selectively magnetizing said magnetic material responsive to an electric current.

45. The apparatus of claim 42 wherein said magnetic material is integrated into said fiber waveguide.

46. The apparatus of claim 41 wherein said elements means include circular polarization filters having a crossed transmission orientation.

47. The apparatus of claim 41 wherein said elements means includes circular polarization filters having an aligned transmission orientation.

48. The apparatus of claim 41 wherein one or more of said wave components may be extinguished responsive to preselected control signals from said controller means to one or more corresponding modulator means.

49. The apparatus of claim 37 wherein said modulator means each have an output port for producing said wave component with said influencer means controlled intensity.

50. The apparatus of claim 31 wherein said output ports are arranged into a display pattern.

51. The apparatus of claim 50 wherein said display pattern is a regular ordered matrix of N rows and M columns.

52. The apparatus of claim 49 further comprising a front panel for arranging said output ports into said pattern.

53. The apparatus of claim 50 wherein said front panel includes a means for effecting each proximate each corresponding output port.

54. The apparatus of claim 53 wherein each said effecting means disperses said wave component from said corresponding output port.